

MARCH 2.

The President, Dr RUSCHENBERGER, in the chair.

Twenty-eight members present.

*On Thin Sections of the Traps of the Mesozoic Basin.*—Prof. FRAZER made the following remarks: The great mesozoic basin traverses York, Adams, Chester, and Montgomery Counties, in Pennsylvania, as well as New Jersey and New York, while detached portions are found in several of the New England States, in none of which are its characteristics more clearly defined than in Connecticut. During a recent visit to New Haven I had the privilege of examining the fine microscopic slides or thin sections which have been prepared by Mr. Dana from the traps of that region. It is of great interest to observe the striking resemblance of these rocks to our own from the same formation. To the eye and even under the magnifying glass they seem the same, whereas in fact they are of, at least, two different kinds.

One kind, which has been described on several occasions before the Academy as that forming the Seminary Ridge near Gettysburg, is a greenish-gray compact dolerite (projected by me on the screen by means of the gas microscope, at a previous meeting), which, under higher magnifying power, shows white tablets of plagioclastic felspar and green crystals of pyroxene, with some chrysolite (olivine).

Far different is the rock which has been previously referred to as Syenite, and which has an apparently similar representative near New Haven. Under the microscope, however, the coarse rock from New Haven resembling the others from that locality in everything but texture, differs materially from the specimen from Gettysburg.

Since my return home I have examined two or three other slides of the Gettysburg rock, and find no essential difference between them. They contain hornblende and quartz; the others do not. The constituents of the coarse rock from both States were pyroxenite, plagioclase, magnetite, some chrysolite, some bicitite, and rarely quartz.

The investigations of the last week have led me to query the occurrence of prehnite in this rock which I reported at the last meeting. But these questions will be settled very soon.

The death of Rev. Henry S. Spackman was announced.